

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system, comprising:  
a plurality of collector devices that are disposed to collect connection information to identify host connection pairs from ~~collect statistical information on~~ packets that are sent between nodes on a network; and  
an aggregator device that receives the connection information ~~network data~~ from the plurality of collector devices, and which produces a connection table that maps each node on the network to a record that stores information about traffic to or from the node.
2. (Currently Amended) The system of claim 1 wherein the aggregator determines at least in part from connection patterns derived from the connection table occurrences of network events.
3. (Currently Amended) The system of claim 2 wherein the aggregator further comprises:  
a process that collect statistical information on packets that are sent between nodes on a network and which sends the statistical information to the aggregator ~~communicates occurrences of network events to an operator~~.
4. (Currently Amended) The system of claim 1 wherein the aggregator device further comprises:  
a process to detect anomalies in connection patterns; and  
a process to aggregate detected anomalies into the network events.

5. (Original) The system of claim 1 wherein the collectors have a passive link to devices in the network.

6. (Currently Amended) The system of claim ~~1~~ 4 wherein the anomalies include denial of service attacks and scanning attacks.

7. (Currently Amended) The system of claim ~~1~~ 4 wherein the anomalies include unauthorized access and worm propagation.

8. (Original) The system of claim 1 wherein the connection table includes a plurality of records that are indexed by source address.

9. (Original) The system of claim 1 wherein the connection table includes a plurality of records that are indexed by destination address.

10. (Original) The system of claim 1 wherein the connection table includes a plurality of records that are indexed by time.

11. (Original) The system of claim 1 wherein the connection table includes a plurality of records that are indexed by source address, destination address and time.

12. (Original) The system of claim 1 wherein the connection table includes a plurality of connection sub-tables to track data at different time scales.

13. (Original) The system of claim 1 wherein the connection sub-tables include a time-slice connection table that operates on a small unit of time and at least one other sub-table that operates on a larger unit of time than the time slice sub-table with each sub-table holding the sum of records received from all collectors during respective units of time.

14. (Currently Amended) A method, comprises:  
~~providing a plurality of collector devices in a network to collect statistical information on~~  
~~packets that are sent between nodes on a network; and~~  
~~sending statistical information from the~~ connection information to identify host  
connection pairs from collected from a plurality of collector devices to an aggregator;[[.]]  
producing in the aggregator ~~producing~~ a connection table that maps each node on the  
network to a record that stores information about traffic to or from the node.

15. (Currently Amended) The method of claim 14 further comprising:  
collecting statistical information in the collector devices to send to the aggregator device.  
~~wherein the aggregator determines occurrences of network events.~~

16. (Currently Amended) The method of claim 15 further comprises:  
determining occurrences of network anomalies; and  
aggregating anomalies into ~~the~~ network events and communicating occurrences of  
network events to an operator.

17. (Original) The method of claim 14 wherein the connection table includes a plurality  
of entries that are indexed by source address.

18. (Original) The method of claim 14 wherein the connection table includes a plurality  
of entries that are indexed by destination address.

19. (Original) The method of claim 14 wherein the connection table includes a plurality  
of records that are indexed by time.

20. (Original) The method of claim 14 wherein the connection table includes a plurality  
of records that are indexed by source address, destination address and time.

21. (Original) The method of claim 14 wherein the connection table includes a plurality of connection sub-tables to track data at different time scales.

22. (Original) The method of claim 14 wherein the connection sub-tables include a time-slice connection table that operates on a small unit of time and at least one other sub-table that operates on a larger unit of time than the time slice sub-table with each sub-table holding the sum of records received from all collectors during respective units of time.

23. (Original) A method of detecting a new host connecting to a network comprises:  
receiving statistics collected from a host in the network; and  
indicating to a console that the host is a new host if, during a period of time T, the host transmits at least N packets and receives at least N packets, and if the host had never transmitted and received more than N packets in any previous period of time with a duration of T.

24. (Currently Amended) A method executed in a computing device for ~~of~~ detecting a failed host in a network comprises:

determining in the computing device, if both a mean historical rate of server response packets from a host is greater than  $M[.]$  and a ratio of a standard deviation of historical rate of server response packets from the host to a mean profiled rate of server response packets from the host is less than R over a period of time; and

indicating the host as a potential failed host if both conditions are present.